

**ABSTRACT OF THE DISCLOSURE**

A method and a system for constructing a control flow graph (CFG, 106) from an executable computer program (104). The solution detects data intermixed with instructions and instruction set changes. The method includes the steps of defining block leader types specifying basic block boundaries in the program (104), building a CFG structure (106) according to the basic blocks found in the program, and adding control flow and addressing information to the CFG (106) by propagating through the basic blocks and internals thereof. The CFG (106) may be then optimised (108) and a compacted executable (112) created as a result.

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